# UNIT-1: Arrays, Structure & Union and User defined function in C

| No | Question | Option A | Option B | Option C | Option D | Correct answer |
|----|----------|----------|----------|----------|----------|----------------|
| 1 | How to declare 2 dimentional array in C ? | (r)(c) | [r][c] | {r}{c} | <r><c> | B |
| 2 | In 2D array data are usually entered as | Element wise | Columns wise | Row wise | size wise | C |
| 3 | Which of the following are themselves a collection of different data types? | string | structures | char | all of the mentioned | B |
| 4 | What is the size of a C structure.? | C structure is always 128 bytes | Size of C structure is the total bytes of all elements of structure. | Size of C structure is the size of largest element. | None of these | B |
| 5 | Array of array is called_____ . | Array | Two Dimension Array | Structure | Variable | B |
| 6 | Which of the following multi-dimensional array declaration is correct for realizing a 3X 2 matrix? | int m[2][3]; | int m[3][2]; | int m[3,2]; | int m[2,3]; | B |
| 7 | The 1st sub-script of 2D array is known as _____ | Row | Column | object | total size of aaray | A |
| 8 | In array, Index starts by ? | 0 | 1 | -1 | 100 | A |
| 9 | What is the output of C Program with arrays.? void main() { int a[3][2]={{1,2},{3,4},{5,6}}; printf("%d",a[2][0]); getch(); } | 5 | 3 | 6 | D) 4 | A |
| 10 | User-defined data type can be derived by_____ | struct | enum | typedef | all of the mentioned | D |
| 11 | What is a String in C Language.? | String is a new Data Type in C | String is an array of Characters with null character as the last element of array. | String is an array of Characters with null character as the first element of array | String is an array of Integers with 0 as the last element of array. | B |
| 12 | Which of the following is valid initialization statement? | int a[][] = {{1,2,3},{1,1,1},{2,2,2}); | int a[3][] = {{1,2,3},{1,1,1},{2,2,2}); | int a[][3] = {{1,2,3},{1,1,1},{2,2,2}); | int a[3][3] = {{1 2 3} {1 1 1} {2 2 2}); | C |
| 13 | A function which calls itself is called a ___ function | Self Function | Auto Function | Recursive Function | Auto Function | C |

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# UNIT-1: Arrays, Structure & Union and User defined function in C

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|---|---|---|---|---|---|---|
| 14 | Which of the following is the correct syntax for initialization of two-dimensional arrays? | int m[3][2]={{1,2},{3,4},{5,6}}; | int m[3][2]={{1,2,3},{4,5,6}}; | int m[3][2]={1,2,3,4,5,6}; | int m[3][2]={1,2},{3,4},{5,6}; | A |
| 15 | Representation of 2 - dimension array with column by column method is called _____. | column minor | Row major | row minor | column major | D |
| 16 | What is the limit for number of functions in a C Program? | 16 | 31 | 32 | No LIMIT | D |
| 17 | Which operator connects the structure name to its member name? | * | <- | . | Both <- and . | C |
| 18 | How to refer an element in ith row jth column of a two-dimensional array x? | x[i,j] | x[i][j] | x[j][i] | x[j,i] | B |
| 19 | What is size of following union ? union demo { float x; int y; char z[10]; }; | 10 Bytes | 14 Bytes | 16 Bytes | 12 Bytes | A |
| 20 | Arguments passed to a function inÂ C language are called ___ arguments. | Formal arguments | Actual Arguments | Definite Arguments | Ideal Arguments | B |
| 21 | Let A is an array of 3*3 and BA = 1100. Find address of A[3][2] using row major. Each element of the array required 1 byte. | 1107 | 1105 | 1106 | 1104 | A |
| 22 | Arguments received by a function in C language are called ___ arguments. | Definite arguments | Formal arguments | Actual arguments | Ideal arguments | B |
| 23 | What is the size of a C Union? | C Union is always 128 bytes | Size of C union is the totatl bytes of all elements of structure | Size of C Union is the size of largest elements | None of the above | C |
| 24 | How many values can a C Function return at a time.? | Only One Value | Maximum of two values | Maximum of three values | Maximum of 8 values | A |
| 25 | What is the default function type/return type in user defined function? | Int | float | char | void | A |
| 26 | To find the length of string which string function is used? | strlen() | length() | len() | string length() | A |

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| 27 | Choose a corrects statement about C language function arguments. | Number of arguments should be same when sending and receiving | Type of each argument should match exactly | Order of each argument should be same | All the above | D |
| 28 | Which of following structure variable declaration is correct for structure name student? | structure student s1; | student s1; | struct student s1; | All | C |
| 29 | What is structure ? | It is user define data type. | B) it is derived data type | C) it is known as variable | D) None of the above | A |
| 30 | Choose correct statements about C Language Pass By Value. | Pass By Value copies the variable value in one more memory location. | pass By Value does not use Pointers. | Pass By Value protects your source or original variables from changes in outside functions or called functions. | All the above | D |
| 31 | Which of the following keyword is used to declare structure? | Struct | union | structure | None of these | A |
| 32 | We have to declare UDF in _____ section? | Global / Public | Main function | Looping | Branching | A |
| 33 | Difference between C Arrays, ary[10] and cry[10][10] is.? | "ary[10] is a single dimensional array. cry[10][10] is a Multidimensional array." | ary[10] is a multidimensional array. cry[10][10] is a single dimensional array. | Size of ary[10] is sizeof(10* int). Size of cry[10][10] is sizeof(10*int). | None of these | A |

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| 34 | Choose the correct statement regarding union. | Unions may contain many member of different types, but it can handle only one member at a time. | All the member use the same storage location. | The compiler allocates a piece of storage that is large enough to hold the largest variable type in the union. | All of the above | D |
| 35 | Which of the following cannot be a structure member? | Function | Array | Structure | None of these | A |
| 36 | Which of the following is valid for union? | union point{ int x , int y}p; | union point{ int x , int y}; | union point{ int x ; int y;}; | All | C |
| 37 | 1. We can pass parameter in UDF.          2. We can return value from UDF | Both FALSE | 1 False, 2 True | 1 True, 2 False | Both TRUE | D |
| 38 | UDF is known as ? | Built in function | User Define Function | Library Function | None of the above | B |
| 39 | Which of the following uses structure? | Array of structures | Linked Lists | Binary Tree | All of the mentioned | D |
| 40 | Union differs from structure in the following way | All members are used at a time | Only one member can be used at a time | Union cannot have more members | Union initialized all members as structure | B |
| 41 | Choose the category of UDF supported by C. | Function with No arguments and no return value | No arguments and a return value | with arguments and no return value | All of the above | D |
| 42 | What will be the output of this program? #include <stdio.h> int main() { union point      {          int x;     int y;      };      union point p = 100;      printf("%d %d",p.x,p.y);      return 0; } | 100 100 | 100 0 | 0 0 | Compilation error | D |
| 43 | Which option is different among all ? | structure | union | typedef | matrix | D |

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| 44 | How many times we call UDF from void main part ? | 5 times | 15 times | only 1 times | there is no limit to call specific function | D |
| 45 | How do you accept a Multi Word Input in C Language.? | scanf | gets | getc | finds | B |
| 46 | Function header of function definition consist of which of the following elements? | Function name | Local variable declaration | Return statement | None of these | A |
| 47 | _____ is the method in which memory addresses of the variables rather than the copies of values are sent to the called function. | Call by value | Call by reference | Call by memory | Call by function | B |
| 48 | size of union is size of the longest element in the union | Yes | No | May Be | Can't Say | A |
| 49 | Which of the Following not include by function Prototype? | return type | arguments type | function body | None | C |
| 50 | The symbol of NULL character is: | \n | \t | \0 | \a | C |
| 51 | An entire array is always passed by ___ to a called function. | Call by value | Call by reference | Address relocation | Address restructure | B |
| 52 | What characters are allowed in a C function name identifier? | Alphabets, Numbers, %, $, _ | Alphabets, Numbers, Underscore ( _ ) | Alphabets, Numbers, dollar $ | Alphabets, Numbers, % | B |
| 53 | Which of the following share a similarity in syntax?     1. Union 2. Structure 3. Arrays 4. Pointers | 3 and 4 | 1 and 2 | 2 and 3 | All of the Above | B |
| 54 | Which of the following is true about typedef? | Does not create new type | It creates new name for some existing type. | Both A and B | none | C |
| 55 | For processing 2-d array, we use two nested for loops. The outer for loop corresponds to the _____ and the inner for loop corresponds to _____. | Row and column | Table and database | First and second | All of the above | A |
| 56 | the memory representation of the 2D arrays can be done in_____ | Row major | Column major | Both row and column | None of the above | C |
| 57 | Collection of strings is represented using array of _____. | Integers | Characters | Float | String | D |
| 58 | by using _____ keyword you can create a user defined name for existing data type. | Struct | Union | Typedef | int | C |

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| 59 | To a structure member, the member name must be linked with the structure variable using _____ | dot . operator | indirection operator | address of operator | conditional operator | A |
| 60 | The embedded structure members can be accessed using struct Employee { char ename[20]; float salary; struct date { int date; int month; int year; }doj; }emp1; | Doj.month | Emp1.month | Emp1.doj.month | All of the above | C |
| 61 | Function prototype is same as the function prototype terminated by_____ | Semicolon | Colon | Dot | Ampersand | A |
| 62 | When we write the main() function before the UDF the _____appears first. | Function call | Function definition | Function declaration | Function name | A |
| 63 | Actual arguments can be_____ | Values | Variables | Expression | All of the above | D |
| 64 | In C, which of the following is an alternative definition for int a[ ][3] = {6,5,4,3,2,1}; ? | int ary[2][3] = {6,5,4,3,2,1}; | int ary[2][3] = {{6,5,4},{3,2,1}}; | int ary[][3] = {{6,5,4},{3,2,1}}; | All of the above | D |
| 65 | Function always return _____ value. | 1 | 0 | 2 | 0 or 1 | D |
| 66 | An array elements are always stored in _____ memory locations. | Sequential | Random | Sequential and Random | None of the above | A |
| 67 | Which of the following is not a component of the UDF? | Function Call | Function Declaration | Function Defination | Main Function | D |
| 68 | If the values in the two dimensional arrays as follows: int a[3][3]={10,20,30,40,50,60,70,80,90}; what will be the index of 60? | 2,1 | 2,0 | 1,2 | 0,1 | C |
| 69 | _____ is a fixed-sized sequenced collection of elements having same Data type having | Array | Stack | Queue | Link list | A |
| 70 | Consider the following array int a[3][3]={1,2,3,4,5,6}. What will be value of a[1][2]? | 1 | 2 | 6 | 3 | C |
| 71 | What will be output for the following code?  void main() { printf("VNSGU");    main();    getch(); } | VNSGU is printed once | VNSGU infinite number of times | VNSGU is not printed at all | ERROR | B |
| 72 | int addition(int,float) represent which category of function? | Function with Argument with return value | Function without Argument with return value | Function with Argument without return value | Function without Argument without return value | A |

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| 73 | Valid declaration and initialization of two dimensional character array | char s[3][]={"abc","xyz","pqr"}; | char s[][5]={"abc","xyz","pqr"}; | char s[][]={"abc","xyz","pqr"}; | char s={"abc","xyz","pqr"}; | B |
| 74 | What is function? | Function is a block of statements that perform some specific task. | Function is the fundamental modular unit. A function is usually designed to perform a specific task. | Function is a block of code that performs a specific task. It has a name and it is reusable. | All the above | D |
| 75 | Which is the correct syntax for writing function header? | int mul(int a, int b) | int mul(int a, int b); | int mul(int , int) | int mul(int a, b); | A |
| 76 | What is the base address with respect to array in C? | The address of the first element of array | The address of the last element of array | The value of first element of array | The value of last element of array | A |
| 77 | _____ assigns a unique storage area of location to the member variables | Array | Structure | Union | None of above | B |
| 78 | union student{ int id, char name[30]}s; printf("%d",sizeof(s)) return | 32 | 30 | 2 | 34 | B |
| 79 | which keyword is used to declare structure? | structure | struct | strutc | stru_ct | B |
| 80 | Recursive functions are executed in a? | First In First Out Order | Load Balancing | Parallel Fashion | Last In First Out Order | D |
| 81 | The variables declared in a function definition are called as_____ | Static | local | Global | External | B |
| 82 | During initialization of two-dimensional array an error occurs if the array size of _____ is not written. | First/Row | Second/Column | a or b | a and b | B |
| 83 | What is the result, if we omit the second dimension during the initialization of two dimensional array? e.g. a[3][]={1,2,3,4,5,6} | The program will run properly but array will not be displayed | The output will be displayed properly | There would be an error | The last value will not be assigned | C |

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| 84 | Valid structure syntax | a) Structure <structure_name> { Datatype member1; . . Datatype membern; } | b) Structure <structure_name> { Datatype member1, . . Datatype membern, }; | c) struc <structure_name> { Datatype member1; . . Datatype membern; }; | d) struct <structure_name> { Datatype member1; . . Datatype membern;}; | D |
| 85 | Which is more appropriate for reading in a multi-word string? | gets( ) | printf( ) | scanf( ) | puts ( ) | A |
| 86 | The major difference between Structure and union is that_____ | Structure stores values of same data type while union stores values of different data type | Structure is a user defined data type and union is in built data type | Structure allocates separate memory for each member while union allocates only for one element | all of above | C |
| 87 | When function is invoked ,execution control is transferred to_____ | called function | Function declaration | In the main() | At the end of the main() | A |
| 88 | In what condition we can exclude the return statement in function? | When function has return type void | When the return type is not specified | When function has return type int | None of the above | A |
| 89 | If return statement is not used inside the function, the function will return: | None | 0 | Null | none of the above | A |
| 90 | User-defined data type can be derived by_____ | struct | enum | typedef | all | D |
| 91 | A _____ resembles a table. | 1D Array | 2D Array | Both | None | B |
| 92 | What will be the output of following? struct person{ char name[20]; int age=0; }; void main(){ struct person p1; p1.age=25; printf(â€œ%dâ€,p1.age); } | 0 | Garbage Value | Compile time error | 25 | C |
| 93 | Which of the following character is appended at the end of each string in two dimensional character array? | Ampersand(&) | Plus (+) | Minus(-) | Null (\0) | D |

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| 94 | #include <stdio.h> #include <conio.h> struct std {    int r; }s;  void main() {    s.r=10;    printf("%d",s.r);    getch(); } | none | 10 | 100 | error | B |
| 95 | Parameters specified at the time of function call are called as_____ | Local | Global | Actual | Formal | C |
| 96 | When we place function prototype inside the function definition is called as | Local prototype | Global prototype | Static prototype | None of the above | A |
| 97 | Choose correct statement about Functions in C Language. | A Function is a group of c statements which can be reused any number of times | Every Function has a return type. | Every Function may no may not return a value | All the above | D |
| 98 | Variables declared inside the function block are called | local variable | global variable | normal variable | function variable | A |
| 99 | The keyword used to transfer control from a function back to the calling function is | switch | goto | return | exit | C |
| 100 | What will be the output of the following code? int add(int,int); void main() { clrscr(); printf(â€œ%dâ€,add(10,add(2,3)); getch(); } | 10 | 5 | 15 | Compile Time Error | C |
| 101 | To enter 5 name of student , which declaration of variable is correct? | char s[5] | char s[5][30] | int s[6][30] | char s[6][30] | B |
| 102 | The default parameter passing mechanism is _____. | Call by value | call by reference | call by  result | None of these | A |
| 103 | If 3X3 integer matrix is stored using row major with base address 1000.What will be the address of an element [1][2]? | 1010 | 1005 | 1000 | None of these | A |
| 104 | What is the output of C program with arrays.?  int main() {    int ary(3)=[20,30,40];    printf("%d", a(1)); } | 20 | 30 | 0 | Compile time Error | D |

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| 105 | Which of the following is/are the case(s) when the called function returns to the calling function in C? | When the return statement is executed in called function | When the closing brace of called function is reached | When the return statement is executed in called function or the closing brace of called function is reached | None of the mentione | C |
| 106 | _____ Parameters are the variable listed inside the parentheses in the function definition | Actual | Formal | local | global | B |
| 107 | In function call statement, programmer can pass | variable | constant value | address of variable | All | D |
| 108 | What will be the address of the arr[2][3] if arr is a 2-D long array of 4 rows and 5 columns and starting address of the array is 2000? | 2048 | 2056 | 2052 | 2042 | C |
| 109 | The call by reference method of passing arguments to a function copies _____ of the argument | value | address | actual value | formal value | B |